

STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

DAVID A. COLE

COMMISSIONER

May 5, 2004

Subject: Jackman, Rockwood Strip T2 R1, Taunton & Raynham Academy Grant and Long Pond Township Project No's:011211.00, STP-1127(400)X, STP-1128(900)X, Bid Amendment No. 1

Dear Sir/Ms.:

Please make the following changes to your Bid Package:

On the "Schedule of Items" – Item No. 310.23 "Plant Mix Recycled Asphalt Pavement- 3 inch Depth" delete the Quantity of **181400.000** and replace with a Quantity of **185100.000**, SY remains the same.

Make this change in Pen and Ink.

Delete "Special Provision (Consolidated Special Provisions)" dated March 24, 2004 twelve pages total, and replace with the attached "Special Provision (Consolidated Special Provisions)" dated April 26, 2004 fourteen pages total.

Add the attached two pages entitled "Supplemental Information Existing Pavement Depth" dated 05/05/04.

Add the attached 6 pages entitled "10.17 GENERAL LAND USE STANDARDS" directly following the "Permits & Cultural Resources Unit" 1 page, for PIN 11289.00, Long Pond Twp.

Add the attached Summery Sheet entitled "Permits & Cultural Resources Unit" PIN # 11211.00, Location: Jackman, one page total.

Consider these changes prior to submitting your bid on May 12, 2004.

Sincerely,

Scott Bickford

Contracts & Specifications Engineer



10.17 GENERAL LAND USE STANDARDS

Section A

This section contains land use standards for the following land use activities:

- 1. Agricultural Management Activities
- 2. Clearing
- 3. Mineral Exploration and Extraction
- 4. Roads and Water Crossings
- 5. Timber Harvesting
- 6. 6. Filling and Grading
- 7. Motorized Recreational Gold Prospecting
- 8. Driveways Associated with Residential Structures and Uses

Activities not in conformance with the standards of Section 10.17, A, may be allowed upon issuance of a permit from the Commission provided that such types of activities are allowed in the subdistrict involved; an applicant for such permit shall show by a preponderance of the evidence that the proposed activity, which is not in conformance with such standards, shall be conducted in a manner which produces no undue adverse impact upon the resource protected or neighboring uses.

The documents referenced within this Section may be obtained from the Commission's office in Augusta, or any of its regional offices.

4. ROADS AND WATER CROSSINGS

The following road and water crossing requirements shall apply to such activities in P-WL1, P-WL2, P-SL, P-FP, P-GP Protection and all Development Subdistricts:

- a. The following requirements shall apply to construction and maintenance of roads:
 - (1) All cut or fill banks and areas of exposed mineral soil outside the roadbed within 75 feet of a flowing, standing or tidal body of water or a wetland shall be revegetated or otherwise stabilized so as to prevent erosion and sedimentation of water bodies or wetlands;
 - (2) Road banks shall have a slope no steeper than 2 horizontal to 1 vertical;
 - (3) Drainage ditches shall be provided so as to effectively control water entering and leaving the road area. Such drainage ditches will be properly stabilized so that the potential for unreasonable erosion does not exist;
 - (4) In order to prevent road surface drainage from directly entering water bodies or wetlands, roads and their associated drainage ditches shall be located, constructed, and maintained so as to provide an unscarified filter strip, of at least the width indicated below, between the exposed mineral soil of the road and the normal high water mark of a surface water body or upland edge of a wetland:

Average Slope of Land Between Exposed Mineral Soil and Normal High Water Mark (Percent)	Width of Strip Between Exposed Mineral Soil and Normal High Water Mark (Feet Along Surface of the Ground)	
0	25	
10	45	
20	65	
30	85	
40	105	
50	125	
60	145	
70	165	

This requirement shall not apply to road approaches to water crossings or wetlands.

- (5) Drainage ditches for roads approaching a water crossing or wetland shall be designed, constructed, and maintained to empty into an unscarified filter strip, of at least the width indicated in the table set forth in subsection (4) above, between the outflow point of the ditch and the normal high water mark of the water or the upland edge of a wetland. Where such filter strip is impracticable, appropriate techniques shall be used to reasonably avoid sedimentation of the water body or wetland. Such techniques may include the installation of sump holes or settling basins, and/or the effective use of additional ditch relief culverts and ditch water turnouts placed so as to reasonably avoid sedimentation of the water body or wetland;
- (6) Ditch relief (cross drainage) culverts, drainage dips and water turnouts will be installed in a manner effective in getting drainage onto unscarified filter strips before the flow in the road or its drainage ditches gains sufficient volume or head to erode the road or ditch.
 - (a) Drainage dips may be used in place of ditch relief culverts only where the road grade is 10% or less;
 - (b) On roads having slopes greater than 10%, ditch relief culverts shall be placed across the road at approximately a 30 degree angle downslope from a line perpendicular to the center line of the road;
 - (c) Ditch relief culverts, drainage dips and water turnouts shall direct drainage onto unscarified filter strips as required in paragraph (4) and (5) above;
 - (d) Ditch relief culverts shall be sufficiently sized and properly installed in order to allow for effective functioning, and their inlet and outlet ends shall be stabilized with appropriate materials; and

(e) Ditch relief culverts, drainage dips and associated water turnouts shall be spaced along the road at intervals no greater than indicated in the following table:

Road Grade	Spacing
Percent	Feet
0-2	500-300
3-5	250-180
6-10	167-140
11-15	136-127
16-20	125-120
21+	100

- b. The following requirements shall apply to water crossings when surface waters are unfrozen:
 - (1) Bridges and culverts shall be installed and maintained to provide an opening sufficient in size and structure to accommodate 10 year frequency water flows or with a cross-sectional area at least equal to 2 1/2 times the cross-sectional area of the stream channel.
 - (2) Culvert and bridge sizes may be smaller than provided in paragraph (1) if techniques are employed such that in the event of culvert or bridge failure, the natural course of water flow is reasonably maintained and sedimentation of the water body is reasonably avoided; such techniques may include, but are not limited to, the effective use of any or all of the following:
 - (a) removing culverts prior to the onset of frozen ground conditions;
 - (b) using water bars in conjunction with culverts; or
 - (c) using road dips in conjunction with culverts.
 - (3) Culverts utilized in water crossings shall:
 - (a) be installed at or below stream bed elevation:
 - (b) be seated on firm ground;
 - (c) have soil compacted at least halfway up the side of the culvert;
 - (d) be covered by soil to a minimum depth of 1 foot or according to the culvert manufacturer's specifications, whichever is greater; and
 - (e) have a headwall at the inlet end which is adequately stabilized by rip-rap or other suitable means to reasonably avoid erosion of material around the culvert.
- c. The design and construction of land management road systems through wetlands, other than those areas below the normal high water mark of standing or flowing waters, must avoid wetlands unless there are no reasonable alternatives, and must maintain the existing hydrology of wetlands.

To maintain the existing hydrology of wetlands, road drainage designs shall provide cross drainage of the water on the surface and in the top 12 inches of soil in wetlands during both flooded and low water conditions so as to neither create permanent changes in wetland water levels nor alter wetland drainage patterns. This shall be accomplished through the

incorporation of culverts or porous layers at appropriate levels in the road fill to pass water at its normal level through the road corridor. Where culverts or other cross-drainage structures are not used, all fills shall consist of free draining granular material.

To accomplish the above, the following requirements apply:

- (1) Road construction on mineral soils or those with surface organic layers up to 4 feet in thickness:
 - (a) Fill may be placed directly on the organic surface compressing or displacing the organic material until equilibrium is reached. With this method, culverts or other cross-drainage structures are used instead of porous layers to move surface and subsurface flows through the road fill material.
 - (i) For road construction on mineral soils or those with surface organic layers less than 16 inches in thickness, culverts or other cross-drainage structures shall be appropriately sized and placed at each end of each wetland crossing and at the lowest elevation on the road centerline with additional culverts at intermediate low points as necessary to provide adequate cross drainage. Culverts or other cross-drainage structures shall be placed at maximum intervals of 300 feet;
 - (ii) For road construction on surface organic layers in excess of 16 inches but less than 4 feet in thickness, cross drainage must be provided by placing culverts at each end of each wetland crossing and at the lowest elevation on the road centerline with additional culverts at intermediate low points as necessary to provide adequate cross drainage. Culverts or other cross-drainage structures shall be placed at maximum 300-foot intervals. Culverts shall be a minimum of 24 inches in diameter, or the functional equivalent, and buried halfway below the soil surface.
 - (iii) Where necessary to maintain existing water flows and levels in wetlands, ditches parallel to the road centerline shall be constructed along the toe of the fill to collect surface and subsurface water, carry it through the culvert(s) and redistribute it on the other side. Unditched breaks shall be left midway between culverts to prevent channelization.
 - (b) Alternatively, a porous layer may be created to move surface and subsurface flows through the road fill materials. If a porous layer is used, geotextile fabric must be placed above and below fill material to increase the bearing strength of the road and to preserve the bearing strength of fill material by preventing contamination with fine soil particles.
- (2) Road construction on soils with organic layers in excess of 4 feet in thickness:
 - (a) Such construction shall only take place under frozen ground conditions.
 - (b) Geotextile fabric shall be placed directly on the soil surface. Road fill or log corduroy shall then be placed on the geotextile fabric.
 - (c) Cross drainage shall be provided by either a continuous porous layer or appropriate placement of culverts or other cross-drainage structures and ditching as specified below:

- (i) A continuous porous layer or layers shall be constructed by placement of one or more layers of wood corduroy and/or large stone or chunkwood separated from adjacent fill layers by geotextile fabric placed above and below the porous layer(s) such that continuous cross drainage is provided in the top 12 inches of the organic layer; or
- (ii) Cross drainage culverts or other cross-drainage structures shall be placed at points where they will receive the greatest support. Culverts or other cross-drainage structures shall be a minimum of 24 inches in diameter, or the functional equivalent, and buried halfway below the soil surface. Where necessary to maintain existing water flows and levels in wetlands, ditches parallel to the roadbed on both sides shall be used to collect surface and subsurface water, carry it through the culvert(s) and redistribute it on the other side. Such ditches shall be located three times the depth of the organic layer from the edge of the road fill. Unditched breaks shall be left midway between culverts to prevent channelization.
- d. Ditches, culverts, bridges, dips, water turnouts and other water control installations associated with roads shall be maintained on a regular basis to assure effective functioning.
- e. Maintenance of the above required water control installations shall continue until the road is discontinued and put to bed by taking the following actions:
 - (1) Water bars shall
 - (a) be constructed and maintained across the road at intervals established below:

Road	Distance Between
Grade	Water Bars
Percent	Feet
0-2	250
3-5	200-135
6-10	100-80
11-15	80-60
16-20	60-45
21+	40

- (b) be constructed at approximately 30 degrees downslope from the line perpendicular to the center line of the road;
- (c) be constructed so as to reasonably avoid surface water flowing over or under the water bar; and
- (d) extend sufficient distance beyond the traveled way so that water does not reenter the road surface.
- (2) Any bridge or water crossing culvert in such road shall satisfy one of the following requirements:

- (a) it shall be designed to provide an opening sufficient in size and structure to accommodate 25 year frequency water flows;
- (b) it shall be designed to provide an opening with a cross-sectional area at least 3 1/2 times the cross-sectional area of the stream channel; or
- (c) it shall be dismantled and removed in a fashion so as to reasonably avoid sedimentation of the water body.
- f. Provided they are properly applied and used for circumstances for which they are designed, methods including but not limited to the following are acceptable to the Commission as means of calculating the 10 and 25 year frequency water flows and thereby determining crossing sizes as required in paragraphs b and e of this Section:
 - (a) The USDA Soil Conservation Service (SCS) Methods; specifically: "Urban Hydrology for Small Watersheds," June 1986 Soil Conservation Service Technical Release #55.
 - (b) The United States Geological Survey (USGS) Methods; specifically: U.S. Geological Survey. 1975. "A Technique for Estimating the Magnitude and Frequency of Floods in Maine." Open- file Report 75-292.
- g. Extension, enlargement or resumption of use of presently existing roads, which are not in conformity with the provisions of this Section, are subject to the provisions of Section 10.11 of this chapter.
- h. Publicly owned roads may be constructed in a fashion that is not in strict conformity with the provisions of this section, provided that other measures are applied that are effective in reasonably avoiding sedimentation of surface waters.
- i. Except that subsection j below always applies, trail crossings of minor flowing waters shall be exempt from the standards of this section, provided such crossings are constructed in a manner that causes no disturbance to the stream bed, and no substantial disturbance to the banks or shoreland areas in the vicinity of the crossing, and provided such crossings do not impede the flow of water or the passage of fish. If properly undertaken, acceptable methods may include but not be limited to the laying of logs from bank to bank, or placement of bed logs and stringers with decking. This exemption shall not extend to the construction of abutments or piers.
 - Trail crossings not so exempted shall be subject to the water crossing standards of this section, including specifically subsections 10.17, A, 4, b, d, e, f, j and k.
- j. In addition to the foregoing minimum requirements, provision shall otherwise be made in the construction and maintenance of roads and water crossings in order to reasonably avoid sedimentation of surface waters.
- i. Written notice of all road and water crossing construction activities, except level A road projects and exempt trail crossings as provided in subsection i above, shall be given to the Commission prior to the commencement of such activities. Such notice shall conform to the requirements of Section 10.20 of this chapter and shall state the manner in which the water crossing size requirements of this section will be satisfied

SPECIAL PROVISION

(Consolidated Special Provisions)

SPECIAL PROVISION SECTION 101 CONTRACT INTERPRETATION

101.2 Definitions - Closeout Documentation

Replace the sentence "A letter stating the amount..... DBE goals." with "DBE Goal Attainment Verification Form"

SPECIAL PROVISION SECTION 102 DELIVERY OF BIDS

(Location and Time)

102.7.1 Location and Time Add the following sentence "As a minimum, the Bidder will submit a Bid Package consisting of the Notice to Contractors, the completed Acknowledgement of Bid Amendments & Submission of Bid Bond Validation Number form, the completed Schedule of Items, 2 copies of the completed Agreement, Offer, & Award form, a Bid Bond or Bid Guarantee, and any other Certifications or Bid Requirements listed in the Bid Book."

SPECIAL PROVISION SECTION 103 AWARD AND CONTRACTING

103.3.1 Notice and Information Gathering

Change the first paragraph to read as follows: "After Bid Opening and as a condition for Award of a Contract, the Department may require an Apparent Successful Bidder to demonstrate to the Department's satisfaction that the Bidder is responsible and qualified to perform the Work."

SPECIAL PROVISION SECTION 105 GENERAL SCOPE OF WORK

Delete the entire Section 105.6 and replace with the following:

105.6.1 Department Provided Services The Department will provide the Contractor with the description and coordinates of vertical and horizontal control points, set by the Department, within the Project Limits, for full construction Projects and other Projects where survey control

is necessary. For Projects of 1,500 feet in length, or less: The Department will provide three points. For Projects between 1,500 and 5,000 feet in length: The Department will provide one set of two points at each end of the Project. For Projects in excess of 5,000 feet in length, the Department will provide one set of two points at each end of the Project, plus one additional set of two points for each mile of Project length. For non-full construction Projects and other Projects where survey control is not necessary, the Department will not set any control points and, therefore, will not provide description and coordinates of any control points. Upon request of the Contractor, the Department will provide the Department's survey data management software and Survey Manual to the Contractor, or its survey Subcontractor, for the exclusive use on the Department's Projects.

105.6.2 Contractor Provided Services Utilizing the survey information and points provided by the Department, described in Subsection 105.6.1, Department Provided Services, the Contractor shall provide all additional survey layout necessary to complete the Work. This may include, but not be limited to, reestablishing all points provided by the Department, establishing additional control points, running axis lines, providing layout and maintenance of all other lines, grades, or points, and survey quality control to ensure conformance with the Contract. The Contractor is also responsible for providing construction centerline, or close reference points, for all Utility Facilities relocations and adjustments as necessary to complete the Work. When the Work is to connect with existing Structures, the Contractor shall verify all dimensions before proceeding with the Work. The Contractor shall employ or retain competent engineering and/or surveying personnel to fulfill these responsibilities.

The Contractor must notify the Department of any errors or inconsistencies regarding the data and layout provided by the Department as provided by Section 104.3.3 - Duty to Notify Department If Ambiguities Discovered.

105.6.2.1 Survey Quality Control The Contractor is responsible for all construction survey quality control. Construction survey quality control is generally defined as, first, performing initial field survey layout of the Work and, second, performing an independent check of the initial layout using independent survey data to assure the accuracy of the initial layout; additional iterations of checks may be required if significant discrepancies are discovered in this process. Construction survey layout quality control also requires written documentation of the layout process such that the process can be followed and repeated, if necessary, by an independent survey crew.

105.6.3 Survey Quality Assurance It is the Department's prerogative to perform construction survey quality assurance. Construction survey quality assurance may, or may not, be performed by the Department. Construction survey quality assurance is generally defined as an independent check of the construction survey quality control. The construction survey quality assurance process may involve physically checking the Contractor's construction survey layout using independent survey data, or may simply involve reviewing the construction survey quality

control written documentation. If the Department elects to physically check the Contractor's survey layout, the Contractor's designated surveyor may be required to be present. The Department will provide a minimum notice of 48 hours to the Contractor, whenever possible, if the Contractor's designated surveyor's presence is required. Any errors discovered through the quality assurance process shall be corrected by the Contractor, at no additional cost to the Department.

105.6.4 Boundary Markers The Contractor shall preserve and protect from damage all monuments or other points that mark the boundaries of the Right-of-Way or abutting parcels that are outside the area that must be disturbed to perform the Work. The Contractor indemnifies and holds harmless the Department from all claims to reestablish the former location of all such monuments or points including claims arising from 14 MRSA § 7554-A. For a related provision, see Section 104.3.11 - Responsibility for Property of Others.

SPECIAL PROVISION SECTION 106 QUALITY

<u>106.6 Acceptance</u> Add the following to paragraph 1 of A: "This includes Sections 401 - Hot Mix Asphalt, 402 - Pavement Smoothness, and 502 - Structural Concrete - Method A - Air Content."

Add the following to the beginning of paragraph 3 of A: "For pay factors based on Quality Level Analysis, and"

SPECIAL PROVISION SECTION 107 TIME

107.3.1 General Add the following: "If a Holiday occurs on a Sunday, the following Monday shall be considered a Holiday. Sunday or Holiday work must be approved by the Department, except that the Contractor may work on Martin Luther King Day, President's Day, Patriot's Day, the Friday after Thanksgiving, and Columbus Day without the Department's approval."

SPECIAL PROVISION SECTION 108 PAYMENT

<u>108.4 Payment for Materials Obtained and Stored</u> First paragraph, second sentence, delete the words "...Delivered on or near the Work site at acceptable storage places."

SPECIAL PROVISION SECTION 109 CHANGES

- <u>109.1.1 Changes Permitted</u> Add the following to the end of the paragraph: "There will be no adjustment to Contract Time due to an increase or decrease in quantities, compared to those estimated, except as addressed through Contract Modification(s)."
- 109.1.2 Substantial Changes to Major Items Add the following to the end of the paragraph: "Contract Time adjustments may be made for substantial changes to Major Items when the change affects the Critical Path, as determined by the Department"
- 109.4.4 Investigation / Adjustment In the third sentence, delete the words "subsections (A) (E)"
- 109.7.2 Basis of Payment Replace with the following: "Equitable Adjustments will be established by mutual Agreement for compensable items listed in Section 109.7.3-Compensable Items, based upon Unit or Lump Sum Prices. If Agreement cannot be reached, the Contractor shall accept payment on a Force Account basis as provided in Section 109.7.5 Force Account Work, as full and complete compensation for all Work relating to the Equitable Adjustment."
- <u>109.7.3 Compensable Items</u> Replace with the following: "The Contractor is entitled to compensation for the following items, with respect to agreed upon Unit or Lump Sum Prices:
 - 1. Labor expenses for non-salaried Workers and salaried foremen.
 - 2. Costs for Materials.
 - 3. A markup on the totals of Items 1 and 2 of this subsection 109.7.3 for home office overhead and profit of the Contractor, its Subcontractors and suppliers, and any lower tier Subcontractors or suppliers, with no mark-ups on mark-ups.
 - 4. Cost for Equipment, based on Blue Book Rates or leased rates, as set forth in Section 109.7.5(C), or the Contractor's Actual Costs.
 - 5. Costs for extended job-site overhead.
 - 6. Time.
 - 7. Subcontractor quoted Work, as set forth below in Section 109.7.5 (F)."

109.7.5 Force Account Work

C. Equipment

Paragraph 2, delete sentence 1 which starts; "Equipment leased...."

Paragraph 6, change sentence 2 from "The Contractor may furnish..." to read "If requested by the Department, the Contractor will produce cost data to assist the Department in the establishment of such rental rate, including all records that are relevant to the Actual Costs including rental Receipts, acquisition costs, financing documents, lease Agreements, and maintenance and operational cost records."

Add the following paragraph; "Equipment leased by the Contractor for Force Account Work and actually used on the Project will be paid for at the actual invoice amount plus 10% markup for administrative costs."

Add the following section;

"<u>F. Subcontractor Quoted Work</u> When accomplishing Force Account Work that utilizes Subcontractor quoted Work, the Contractor will be allowed a maximum markup of 5% for profit and overhead."

SPECIAL PROVISION SECTION 401 HOT MIX ASPHALT PAVEMENT

401.18 Quality Control Method A & B Make the following change to paragraph a. QCP Administrator; in the final sentence, change "...certified as a Plant Technician or Paving Inspector..." to "...certified as a Quality Assurance Technologist..."

<u>401.201 Method A</u> Under <u>a. Lot Size</u>, add the following; 'Each lot will be divided into a minimum of four sublots for mix properties and five sublots for percent TMD."

SPECIAL PROVISION SECTION 402 PAVEMENT SMOOTHNESS

Add the following: "Projects to have their pavement smoothness analyzed in accordance with this Specification will be so noted in Special Provision 403 - Bituminous Box."

<u>"402.02 Lot Size</u> Lot size for smoothness will be 1000 lane-meters [3000 lane-feet]. A sublot will consist of 20 lane-meters [50 lane-feet]. Partial lots will be included in the previous lot if less than one-half the size of a normal lot. If greater than one-half the normal lot size, it will be tested as a separate lot."

SPECIAL PROVISION SECTION 502 STRUCTURAL CONCRETE

502.0502 Quality Assurance Method A - Rejection by Resident Change the first sentence to read: "For an individual sublot with test results failing to meet the criteria in Table #1, or if the calculated pay factor for Air Content is less than 0.80....."

<u>502.0503</u> Quality Assurance Method B - Rejection by Resident Change the first sentence to read: "For material represented by a verification test with <u>test results failing to meet the criteria</u> in Table #1, the Department will....."

502.0505 Resolution of Disputed Acceptance Test Results Combine the second and third sentence to read: "Circumstances may arise, however, where the Department may"

SPECIAL PROVISION SECTION 504 REINFORCING STEEL

504.18 Plates for Fabricated Members Change the second paragraph, first sentence from: "...ASTM A 898/A 898 M..." to "...ASTM A 898/A 898 M or ASTM A 435/A 435 M as applicable and..."

SPECIAL PROVISION SECTION 535 PRECAST, PRESTRESSED CONCRETE SUPERSTRUCTURE

535.02 Materials Change "Steel Strand for Concrete Reinforcement" to "Steel Strand." Add the following to the beginning of the third paragraph; "Concrete shall be Class P conforming to the requirements in this section. 28 day compressive strength shall be as stated on the plans. Coarse aggregate...."

535.26 Lateral Post-Tensioning Replace the first paragraph; "A final tension..." with "Overstressing strands for setting losses cannot be accomplished for chuck to chuck lengths of 7.6 m [25 ft] and less. In such instances, refer to the Plans for all materials and methods. Otherwise, post-tensioning shall be in accordance with PCI standards and shall provide the anchorage force noted in the Plans. The applied jacking force shall be no less than 100% of the design jacking force."

SPECIAL PROVISION SECTION 604 MANHOLES, INLETS, AND CATCH BASINS

604.02 Materials Add the following:

"Tops and Traps 712.07 Corrugated Metal Units 712.08 Catch Basin and Manhole Steps 712.09"

SPECIAL PROVISION SECTION 615 LOAM

<u>615.02 Materials</u> Make the following change:

Organic Content Percent by Volume

Humus "5% - 10%", as determined by Ignition Test

SPECIAL PROVISION SECTION 618 SEEDING

<u>618.01 Description</u> Change the first sentence to read as follows: "This work shall consist of furnishing and applying seed" Also remove ",and cellulose fiber mulch" from 618.01(a).

<u>618.03 Rates of Application</u> In 618.03(a), remove the last sentence and replace with the following: "These rates shall apply to Seeding Method 2, 3, and Crown Vetch."

In 618.03(c) "1.8 kg [4 lb]/unit." to "1.95 kg [4 lb]/unit."

618.09 Construction Method In 618.09(a) 1, sentence two, replace "100 mm [4 in]" with "25 mm [1 in] (Method 1 areas) and 50 mm [2 in] (Method 2 areas)"

618.15 Temporary Seeding Change the Pay Unit from Unit to Kg [lb].

SPECIAL PROVISION SECTION 620 GEOTEXTILES

620.03 Placement Section (c)

Title: Replace "Non-woven" in title with "Erosion Control".

First Paragraph: Replace first word "Non-woven" with "Woven monofilament".

Second Paragraph: Replace second word "Non-woven" with "Erosion Control".

620.07 Shipment, Storage, Protection and Repair of Fabric Section (a)

Replace the third sentence with the following: "Damaged geotextiles, <u>as identified by the Resident</u>, shall be repaired immediately."

620.09 Basis of Payment

Pay Item 620.58: Replace "Non-woven" with "Erosion Control" Pay Item 620.59: Replace "Non-woven" with "Erosion Control"

SPECIAL PROVISION SECTION 626 HIGHWAY SIGNING

<u>626.034 Concrete Foundations</u> Add to the following to the end of the second paragraph: "Pre-cast and cast-in-place foundations shall be warranteed against leaning and corrosion for two years after the project is completed. If the lean is greater than 2 degrees from normal or the foundation is spalling within the first two years, the Contractor shall replace the foundation at no extra cost."

SPECIAL PROVISION SECTION 637 DUST CONTROL

637.06 Basis of Payment Add the following after the second sentence of the third paragraph: "Failure by the Contractor to follow Standard Specification or Special Provision - Section 637 and/or the Contractor's own Soil Erosion and Pollution Control Plan concerning Dust Control and/or visible evidence of excessive dust problems, as determined by the Resident, will result in a reduction in payment, computed by reducing the Lump Sum Total by 5% per occurrence per day. The Department's Resident or any other representative of the Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item. Additional penalties may also be assessed in accordance with Special Provision 652 - Work Zone Traffic Control and Standard Specification 656 - Temporary Soil Erosion and Water Pollution Control."

SPECIAL PROVISION SECTION 639 ENGINEERING FACILITIES

<u>639.04 Field Offices</u> Change the forth to last paragraph from: "The Contractor shall provide a fully functional desktop copier..." to "....desktop copier/scanner..."

SPECIAL PROVISION SECTION 652 MAINTENANCE OF TRAFFIC

652.8.2 Other Items Replace the last paragraph with the following: "There will be no payment made under any 652 pay items after the expiration of the adjusted total contract time."

SPECIAL PROVISION SECTION 656 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL

656.5.1 If Pay Item 656.75 Provided Replace the second paragraph with the following: "Failure by the Contractor to follow Standard Specification or Special Provision - Section 656 and/or the Contractor's own Soil Erosion and Pollution Control Plan will result in a reduction in payment, computed by reducing the Lump Sum Total by 5% per occurrence per day. The Department's Resident or any other representative of the Department reserves the right to suspend the work at any time and request a meeting to discuss violations and remedies. The Department shall not be held responsible for any delay in the work due to any suspension under this item."

SPECIAL PROVISION SECTION 703 AGGREGATES

703.06 Aggregate for Base and Subbase Delete the first paragraph: "The material shall have..." and replace with "The material shall have a minimum degradation value of 15 as determined by Washington State DOT Test Method T113, Method of Test for Determination of Degradation Value (March 2002 version), except that the reported degradation value will be the result of testing a single specimen from that portion of a sample that passes the 12.5 mm [½ in] sieve and is retained on the 2.00 mm [No. 10] sieve, minus any reclaimed asphalt pavement used."

703.07 Aggregates for HMA Pavements Delete the forth paragraph: "The composite blend shall have..." and replace with "The composite blend, minus any reclaimed asphalt pavement used, shall have a Micro-Deval value of 18.0 or less as determined by AASHTO TP 58. In the event the material exceeds the Micro Deval limit, a Washington Degradation test shall be performed. The material shall be acceptable if it has a value of 30 or more as determined by Washington State DOT Test Method T 113, Method of Test for Determination of Degradation Value (March 2002 version) except that the reported degradation value will be the result of testing a single composite specimen from that portion of the sample that passes the 12.5mm [1/2 inch] sieve and is retained on the 2.00mm [No 10] sieve, minus any reclaimed asphalt pavement used."

703.22 Underdrain Backfill Material Change the first paragraph from "...for Underdrain Type B..." to "...for Underdrain Type B and C..."

SPECIAL PROVISION SECTION 709 REINFORCING STEEL AND WELDED STEEL WIRE FABIC

709.03 Steel Strand Change the second paragraph from "...shall be 12mm [½ inch] AASHTO M203M/M203 (ASTM A416/A416M)..." to "...shall be 15.24 mm [0.600 inch] diameter AASHTO M203 (ASTM A416)..."

SPECIAL PROVISION SECTION 712 MISCELLANEOUS HIGHWAY MATERIALS

Add the following:

<u>"712.07 Tops, and Traps</u> These metal units shall conform to the plan dimensions and to the following specification requirements for the designated materials.

Gray iron castings shall conform to the requirements of AASHTO M105, Class 30, unless otherwise designated.

Carbon steel castings shall conform to the requirements of AASHTO M103/M103M. Grade shall be 450-240 [65-35] unless otherwise designated.

Structural steel shall conform to the requirements of AASHTO M183/M183M or ASTM A283/A283M, Grade B or better. Galvanizing, where specified for these units, shall conform to the requirements of AASHTO M111.

<u>712.08 Corrugated Metal Units</u> The units shall conform to plan dimensions and the metal to AASHTO M36/M36M. Bituminous coating, when specified, shall conform to AASHTO M190 Type A.

<u>712.09 Catch Basin and Manhole Steps</u> Steps for catch basins and for manholes shall conform to ASTM C478M [ASTM C478], Section 13 for either of the following material:

- (a) Aluminum steps-ASTM B221M, [ASTM B211] Alloy 6061-T6 or 6005-T5.
- (b) Reinforced plastic steps Steel reinforcing bar with injection molded plastic coating copolymer polypropylene. Polypropylene shall conform to ASTM D 4101.

<u>712.23 Flashing Lights</u> Flashing Lights shall be power operated or battery operated as specified.

(a) Power operated flashing lights shall consist of housing, adapters, lamps, sockets, reflectors, lens, hoods and other necessary equipment designed to give clearly visible signal indications within an angle of at least 45 degrees and from 3 to 90 m [10 to 300 ft] under all light and atmospheric conditions.

Two circuit flasher controllers with a two-circuit filter capable of providing alternate flashing operations at the rate of not less than 50 nor more than 60 flashes per minute shall be provided.

The lamps shall be 650 lumens, 120 volt traffic signal lamps with sockets constructed to properly focus and hold the lamp firmly in position.

The housing shall have a rotatable sun visor not less than 175 mm [7 in] in length designed to shield the lens.

Reflectors shall be of such design that light from a properly focused lamp will reflect the light rays parallel. Reflectors shall have a maximum diameter at the point of contact with the lens of approximately 200 mm [8 in].

The lens shall consist of a round one-piece convex amber material which, when mounted, shall have a visible diameter of approximately 200 mm [8 in]. They shall distribute light and not diffuse it. The distribution of the light shall be asymmetrical in a downward direction. The light distribution of the lens shall not be uniform, but shall consist of a small high intensity portion with narrow distribution for long distance throw and a larger low intensity portion with wide distribution for short distance throw. Lenses shall be marked to indicate the top and bottom of the lens.

(b) Battery operated flashing lights shall be self- illuminated by an electric lamp behind the lens. These lights shall also be externally illuminated by reflex-reflective elements built into the lens to enable it to be seen by reflex-reflection of the light from the headlights of oncoming traffic. The batteries must be entirely enclosed in a case. A locking device must secure the case. The light shall have a flash rate of not less than 50 nor more than 60 flashes per minute from minus 30 °C [minus 20 °F] to plus 65 °C [plus 150 °F]. The light shall have an on time of not less than 10 percent of the flash cycle. The light beam projected upon a surface perpendicular to the axis of the light beam shall produce a lighted rectangular projection whose minimum horizontal dimension shall be 5 degrees each side of the horizontal axis. The effective intensity shall not have an initial value greater than 15.0 candelas or drop below 4.0 candelas during the first 336 hours of continuous flashing. The illuminated lens shall appear to be uniformly bright over its entire illuminated surface when viewed from any point within an angle of 9 degrees each side of

the vertical axis and 5 degrees each side of the horizontal axis. The lens shall not be less than 175 mm [7 in] in diameter including a reflex-reflector ring of 13 mm [½ in] minimum width around the periphery. The lens shall be yellow in color and have a minimum relative luminous transmittance of 0.440 with a luminance of 2854° Kelvin. The lens shall be one-piece construction. The lens material shall be plastic and meet the luminous transmission requirements of this specification. The case containing the batteries and circuitry shall be constructed of a material capable of withstanding abuse equal to or greater than 1.21 mm thick steel [No. 18 U.S. Standard Gage Steel]. The housing and the lens frame, if of metal shall be properly cleaned, degreased and pretreated to promote adhesion. It shall be given one or more coats of enamel which, when dry shall completely obscure the metal. The enamel coating shall be of such quality that when the coated case is struck a light blow with a sharp tool, the paint will not chip or crack and if scratched with a knife will not powder. The case shall be so constructed and closed as to exclude moisture that would affect the proper operation of light. The case shall have a weep hole to allow the escape of moisture from condensation. Photoelectric controls, if provided, shall keep the light operating whenever the ambient light falls below 215 lx [20] foot candles]. Each light shall be plainly marked as to the manufacturer's name and model number.

If required by the Resident, certification as to conformance to these specifications shall be furnished based on results of tests made by an independent testing laboratory. All lights are subject to random inspection and testing. All necessary random samples shall be provided to the Resident upon request without cost to the Department. All such samples shall be returned to the Contractor upon completion of the tests.

- 712.32 Copper Tubing Copper tubing and fittings shall conform to the requirements of ASTM B88M Type A [ASTM B88, Type K] or better.
- <u>712.33 Non-metallic Pipe, Flexible</u> Non-metallic pipe and pipe fittings shall be acceptable flexible pipe manufactured from virgin polyethylene polymer suitable for transmitting liquids intended for human or animal consumption.
- 712.34 Non-metallic Pipe, Rigid Non-metallic pipe shall be Schedule 40 polyvinylchloride (PVC) that meets the requirement of ASTM D1785. Fittings shall be of the same material.
- <u>712.341 Metallic Pipe</u> Metallic pipe shall be ANSI, Standard B36.10, Schedule 40 steel pipe conforming to the requirements of ASTM A53 Types E or S, Grade B. End plates shall be steel conforming to ASTM A36/A36M.

Both the sleeve and end plates shall be hot dip galvanized. Pipe sleeve splices shall be welded splices with full penetration weld before galvanizing.

712.35 Epoxy Resin Epoxy resin for grouting or sealing shall consist of a mineral filled thixotropic, flexible epoxy resin having a pot life of approximately one hour at 10°C [50°F]. The grout shall be an approved product suitable for cementing steel dowels into the preformed holes of curb inlets and adjacent curbing. The sealant shall be an approved product, light gray in color and suitable for coating the surface.

<u>712.36 Bituminous Curb</u> The asphalt cement for bituminous curb shall be of the grade required for the wearing course, or shall be Viscosity Grade AC-20 meeting the current requirements of Subsection 702.01 Asphalt Cement. The aggregate shall conform to the requirements of Subsection 703.07. The coarse aggregate portion retained on the 2.36 mm [No. 8] sieve may be either crushed rock or crushed gravel.

The mineral constituents of the bituminous mixture shall be sized and graded and combined in a composite blend that will produce a stable durable curbing with an acceptable texture. Bituminous material for curb shall meet the requirements of Section 403 - Hot Bituminous Pavement.

<u>712.37 Precast Concrete Slab</u> Portland cement concrete for precast slabs shall meet the requirements of Section 502 - Structural Concrete, Class A.

The slabs shall be precast to the dimension shown on the plans and cross section and in accordance with the Standard Detail plans for Concrete Sidewalk Slab. The surface shall be finished with a float finish in accordance with Subsection 502.14(c). Lift devices of sufficient strength to hold the slab while suspended from cables shall be cast into the top or back of the slab.

<u>712.38 Stone Slab</u> Stone slabs shall be of granite from an acceptable source, hard, durable, predominantly gray in color, free from seams which impair the structural integrity and be of smooth splitting character. Natural color variations characteristic of the deposit will be permitted. Exposed surfaces shall be free from drill holes or indications of drill holes. The granite slabs in any one section of backslope must be all the same finish.

The granite slabs shall be scabble dressed or sawed to an approximately true plane having no projections or depressions over 13 mm [½ in] under a 600 mm [2 ft] straightedge or over 25 mm [1 in] under a 1200 mm [4 ft] straightedge. The arris at the intersection of the top surface and exposed front face shall be pitched so that the arris line is uniform throughout the length of the installed slabs. The sides shall be square to the exposed face unless the slabs are to be set on a radius or other special condition which requires that the joints be cut to fit, but in any case shall be so finished that when the stones are placed side by side no space more than 20 mm [3/4 in] shall show in the joint for the full exposed height.

Liftpin holes in all sides will be allowed except on the exposed face.

SPECIAL PROVISION SECTION 717 ROADSIDE IMPROVEMENT MATERIAL

717.05 Mulch Binder. Change the third sentence to read as follows:

"Paper fiber mulch may be used as a binder at the rate of 2.3 kg/unit [5 lb/unit]."

Supplemental Information Existing Pavement Depth

Jackman - S	ection 1 (11211.00)	
16+45	6"	116+45 4"
21+45	6"	126+45 4"
26+45	6"	136+45 4"
36+45	5"	146+45 5"
46+45	5"	151+45 5"
51+45	5"	156+45 4"
61+45	5"	166+45 4"
71+45	4"	171+45 5"
81+45	4"	186+45 5"
86+45	5"	196+45 4"
96+45	4"	206+45 4"
106+45 5"		

Taunton & Raynham Level 2 (11274.00)

275+73 5"

290+73 5"

300+73 5"

310+73 5"

320+73 5"

340+73 6"

355+73 6"

360+73 6"

Rockwood – Section 2 (11211.00)

141+57 5"

151+57 6"

161+57 7"

166+57 5"

181+57 6"

191+57 6"

201+57 4"

211+57 5"

Taunton & Raynham – Section 3 (11211.00)

51+25	6"
61+25	4"
66+25	4"
71+25	12.0"
76+25	7"
81+25	6"
86+25	8"
91+25	6"
96+25	5"

This is for informational purposes only. The contractor shall be responsible for verifying the existing depths of pavement.

Supplemental Information

- 1. The location of the granular material (2,700 C.Y. +-) that can be used for drives, granular borrow for pipe installation and the bottom 12" as Item 304.104 in full construction areas is located at the Plum Creek Pit in Parlin Pond located on route 201
- 2. The following areas will need to be shimmed from the ¼ point to outside edge of shoulder (7.5'-8.5') with PM RAP on Project Long Pond Twp. PIN 11289.00. The average depth of PM RAP is 2½"-3" and shall be paid for by the square yard under Item 310.23

LEFT	RIGHT
22+50-25+75	28+25-29+75
27+25-32+25	131+25-132+75
36+25-41+50	135+75-138+75
68+00-70+25	
74+75-78+25	
123+25-125+25	
126+75-129+00	
131+50-134+25	
137+50-145+00	
196+25-197+75	

3. Breakdown of Item 304.104 Plan Quantity A.S.C.G.

PIN 11211.00 Section I Jackman 13,000 C.Y.

PIN 11211.00 Section II Rockwood 4,300 C.Y.

PIN 11211.00 Section III Taunton-Raynham 2,900 C.Y.

PIN 11274.00 Taunton-Raynham 5,000 C.Y.



PIN #: 11211.0				
Location: Jacki			<u>_</u>	
Permit Member	: Laurie Rowe Ph	otographs 🛚	Database/Projex Package	to ENV Coordinator: 4/20/04
⊠ Section 10	6 and Tribal Consultation			
Archi	tectural Resources		MOA □ Applicable ⊠ A	Approved ⊠
Arche	eological Resources		MOA □ Applicable ⊠ A	Approved⊠
Triba	l Consultation			Approved \square
			. Pr	rr ····
☒ 4(f) and 6(f)			
Section 4(N/A ⊠	Applicable□ Approved	П
LAWCON		N/A⊠		
LAWCON	0(1)	N/AL	Applicable□ Approved	Ц
			· · · · · · · · · · · · · · · · · · ·	
⊠ FEMA		N/A ⊠	Applicable□ Approved	
■ Maine Dep			DEP) Site Location of Develop	pment
	$N/A \boxtimes Applicable \square$	Approve	l 🗖	
■ Local Zor	ing, Title 30-A, Section 432	5-6 .		
Is the proj	ect something other than the l	nighway and b	idge system, such as a maintena	ance lot, building/parking facility? Yes
	. If no, the project is exemp			, 61 6 3
			is located have a comprehensive	e plan consistent with the Growth
	ent Program? Yes \(\Boxed{\text{No}}\) No \(\Boxed{\text{D}}\).			plan consistent with the Growth
	ning ordinances and/or permit		Approved □	
II yes, local zoi	ing ordinances and/or permit	s are needed.	Approved \square	
- N. D		1 ***** 1114		
⊠ Maine De			(MDIFW) Essential Habitat	
		☐ Applical		
	Piping Plover N/A		e □ Approved □	
	Roseate Tern N/A		e□ Approved □	
Work within	Essential Habitat Circle	is limited to	8/16 to 1/31, See map for C	ircle Location
	ates Fish and Wildlife Servi			
⊠ United St	N/A ⊠ Applicable □	cc (OSF WS),	viigiatory Bird Act	
	N/A E Applicable L			
☑ M.' D.		N 1.12 . T 1	C 1 11 11	
⊠ Maine De	partment of Conservation/ I	rubiic Lands	Submerged Land Lease	
	$N/A \boxtimes Applicable \square$			
∠ Land Use I	Regulation Commission (LU	RC) 🗵 N	ot Applicable	
	No permit			
	Notice		Approved □	
	Permit		Approved □	
⊠ Maine	Department of Environmen	tal Protection	(MDEP), Natural Resource P	rotection Act
	No permit requ		,,,	
	Exempt \square		e erosion and sediment control a	nd not block fish passage)
		(IVIUST U		ind not block fish passage.)
			Approved ⊠	
	Tier 1		Approved □	
	Tier 2 \square		Approved \square	
	Tier 3 □		Approved □	
	os of Engineers (ACOE), Se	ction 10 of th	Rivers and Harbors Act and	Section 404 of the Clean Water Act.
J 1	g (//,			
	No permit requ	ired □		
	Category 1-NF		Approved ⊠	
		(I		
	Category 2□		Approved □	
	Category 3□		Approved □	
	R TIMING RESTRICTION		ll Provision ⊠ n/a □	
Dates	instream work is allowed: 7/	15-8/31		

⊠ Special Provision 656, Erosion Control Plan
Boxes marked in red indicate items that are attached and need to be placed in the contract by the Project Manager.